

KENWOOD

CASSETTE-RECEIVER

KRC-3004

KRC-2004

KRC-1004

INSTRUCTION MANUAL

KENWOOD CORPORATION

Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new cassette-receiver.

For your records

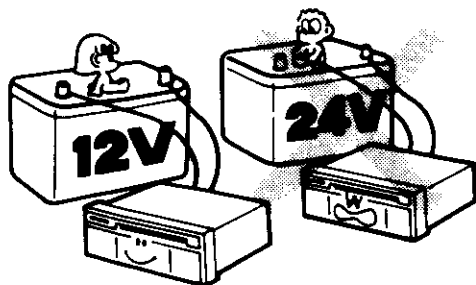
Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

Model KRC-3004/2004/1004 Serial number _____

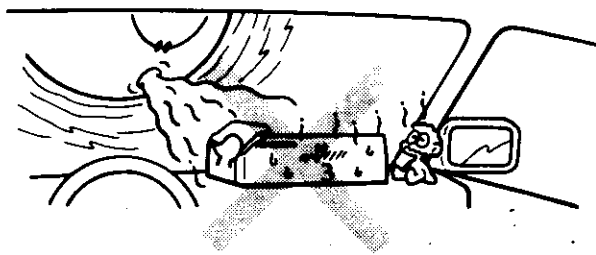
WARNING

TO PREVENT ELECTRIC SHOCK,
FIRE AND OTHER INJURY.
PLEASE NOTE THE FOLLOW-
INGS:

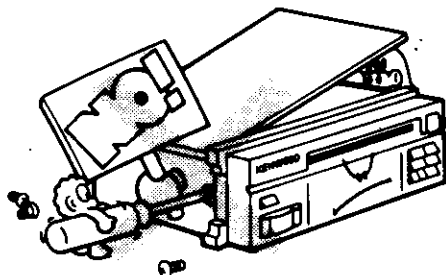
- The unit is designed to be connected 12 V DC and negative grounding.



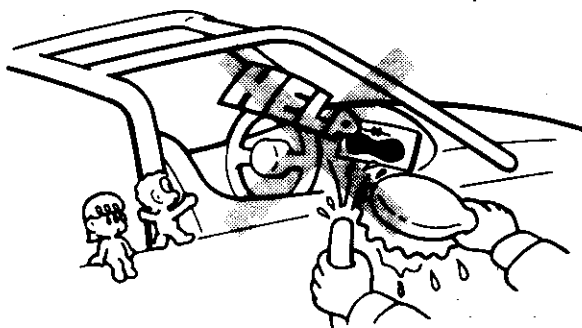
- Do not place the unit, where it will be exposed to direct sunlight or close to heating device.



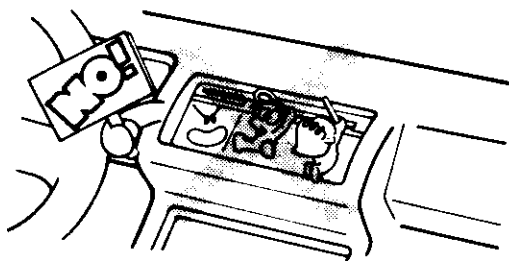
- Do not open enclosure, such as front panel, top or bottom cover.



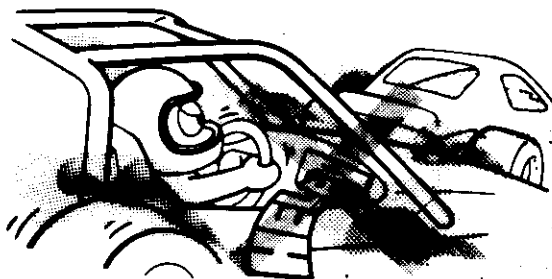
- Do not dash water on the unit.



- Do not drop pieces of metal, needles, coins and other electrically conductive materials into the unit.

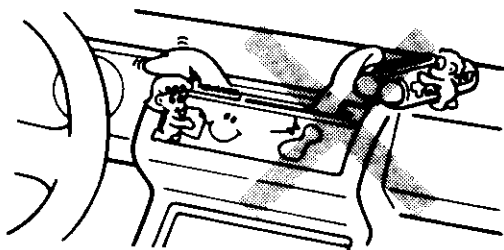


- Do not place the unit in areas of excessive dust, high humidity or on unstable surfaces.



CLEANING

1. Turn the power off, before cleaning the unit.
2. Do not use any type of abrasive pad, thinner, benzene and any such kind of objects.
3. Wipe the front panel and other exterior surfaces of the unit with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.



- If an abnormal smell or smoke is detected, immediately turn the power off.



- If you have difficulty in installing the set in your car, please contact your KENWOOD dealer.

FCC WARNING:

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE

NOTES ON HANDLING TAPE

- Before loading a cassette, check the tape for slack. If there is slack tape, remove it using a pencil to turn one of the spools in the cassette shell.
- Do not expose the cassette tape to direct sunlight. Leaving a cassette at high temperature or humidity can deform the cassette shell or tape.
- 120-minute tape is very thin. Avoid its use, because it can easily be twisted around the pinch roller.


HEAD CLEANING

Magnetic particles from the tape adhere to the head surface after a long period of use, resulting in noise and poor quality sound. Clean the head with cleaning tape available at your KENWOOD dealer. And follow the directions with the head cleaner.

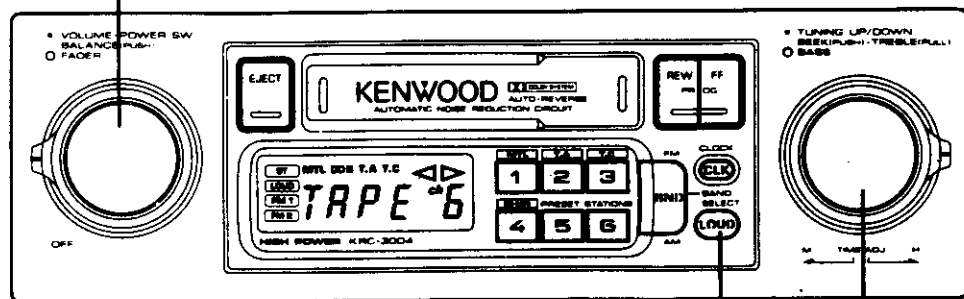
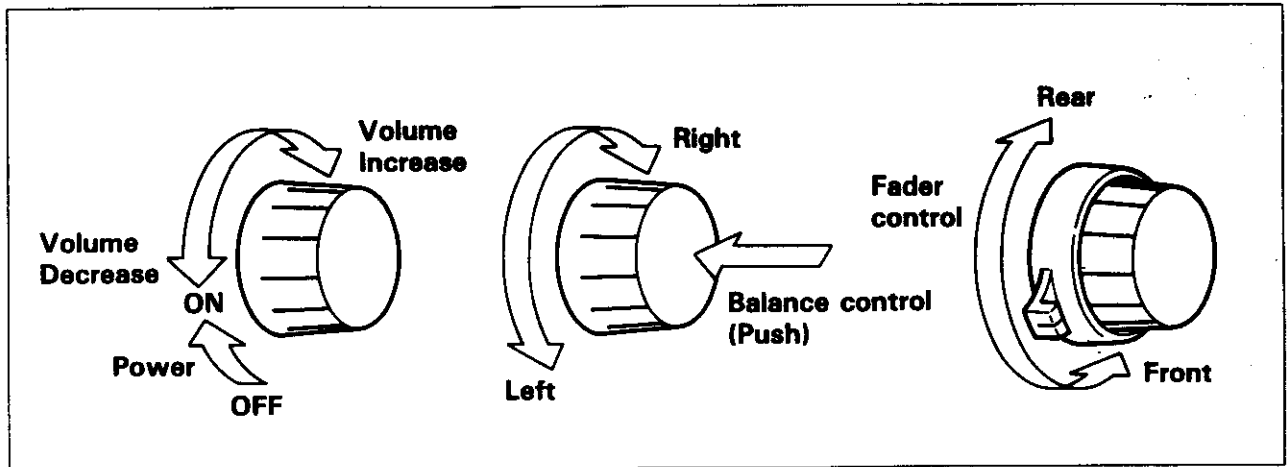
CONTENTS

	Page
• SOUND LEVEL AND QUALITY	5
• SEEK TUNING	6
• MANUAL TUNING	7
• PRESET STATION TUNING	8
• TAPE PLAYBACK	9
• METAL TAPE AND DOLBY NR	10
• TAPE ADVANCE (Functions of KRC-3004)	11
• TUNER CALL (Functions of KRC-3004)	12
• CLOCK INDICATION AND CLOCK ADJUSTMENT	13
• ACCESSORIES AND INSTALLATION	14
• CONNECTIONS (KRC-3004)	15
• CONNECTIONS (KRC-2004)	16
• CONNECTIONS (KRC-1004)	17
• INSTALLATION	18
• TROUBLESHOOTING GUIDE	19
• SPECIFICATIONS	20

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

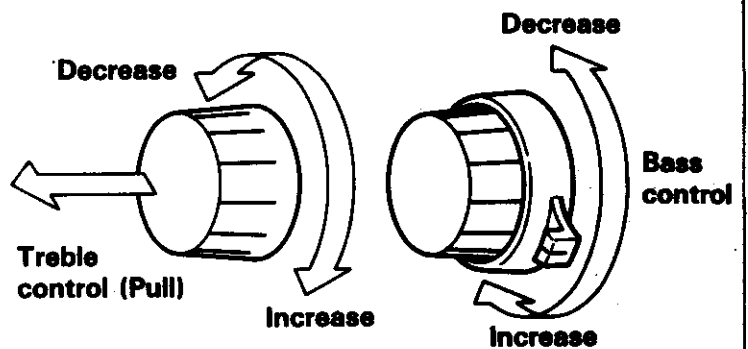
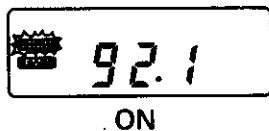
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

SOUND LEVEL AND QUALITY



LOUDNESS SWITCH

When listening at low volume levels, pressing this switch will activate the loudness circuit which will compensate for the human ear's lack of sensitivity to bass at low levels.

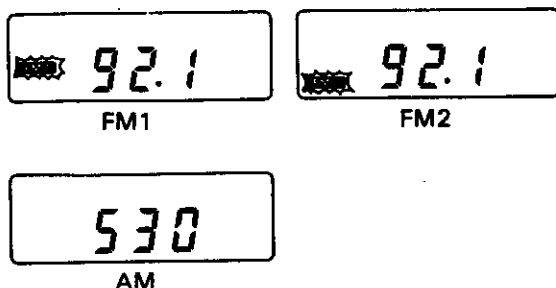


- Turning the power ON automatically turns this unit to a tuner mode.
- Explain how to operate hereafter with the power ON.

SEEK TUNING

1

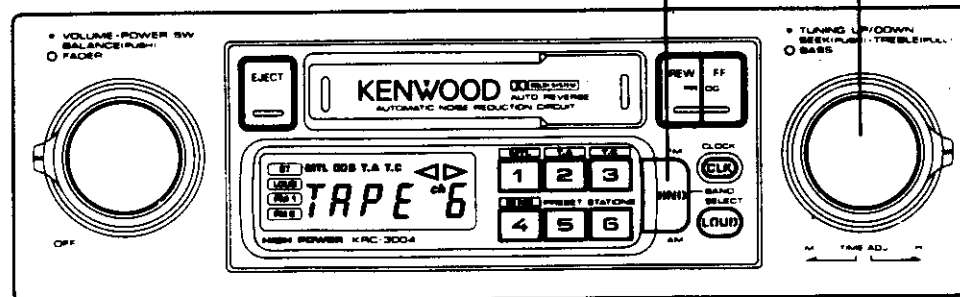
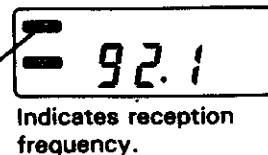
Select the desired Band.
(The band changes to FM1, FM2 and AM as you press each time.)



2

Press Seek switch.
(Up seek starts and receives a strong broadcast station.)

Lit when stereo
broadcast is
received.



■ Channel space selection

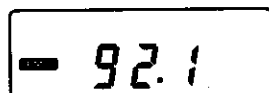
The KRC-3004/2004/1004 has a channel space select function.

Two spacing frequencies are available for both FM and AM, 200 kHz or 50 kHz for FM, and 10 kHz or 9 kHz for AM.

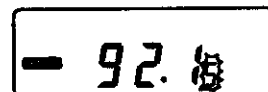
1. With the power OFF, press the "1" and the "5" Preset station switches simultaneously.
 2. Turn the power ON while holding both switches pressed.
 3. The channel spacing is changed to 50 kHz for FM and 9 kHz for AM. To return to the initial condition (200 kHz for FM and 10 kHz for AM), perform this operation once more.
- When the channel spacing is set to 50 kHz for FM, the last "50" is expressed by "5" in the display.

For example:

92.10 MHz →



92.15 MHz →




- When the channel space is changed, the memorized contents are stored.
- The channel space selection is not used in United States or Canada.

MANUAL TUNING

1

Select the desired Band.
(The band changes to FM1, FM2 and AM as you press each time.)

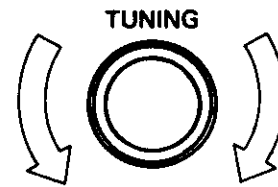
 92.1
FM1

 92.1
FM2

530
AM

2

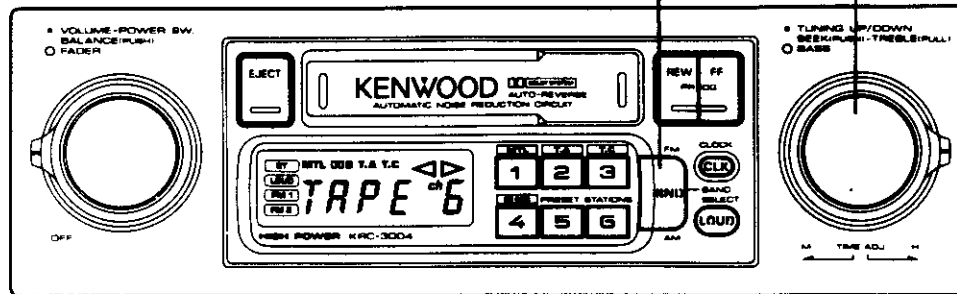
Select a desired frequency by twisting the knob.



For lower frequencies

For higher frequencies


(If you twist and hold the knob, the frequency changes continuously.)



3

Indicates the frequency being received.

Lit when stereo broadcast is received.

 92.1

Indicates reception frequency.

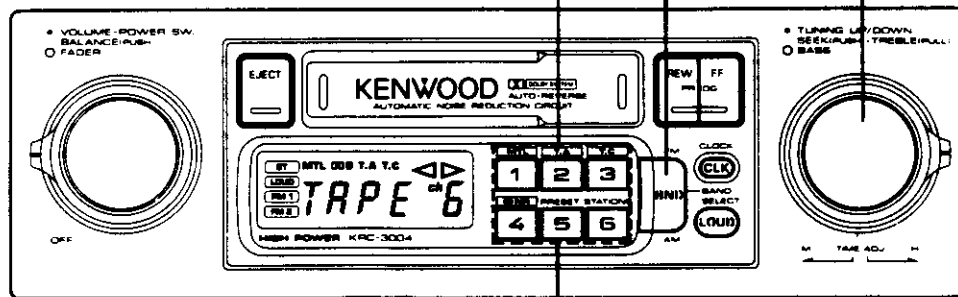
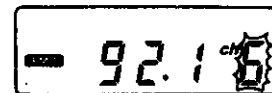
PRESET STATION TUNING

1

Selects the band and station you wish to preset.

2

Press the Preset station switch you wish to be kept preset for more than 2 seconds. (When it is preset, the number of switch pressed will be indicated.)

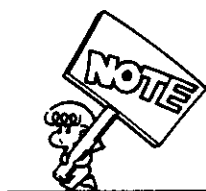
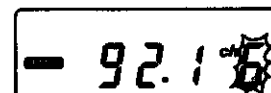


3

By repeating operation of 1 - 2 above, one station can be memorized in one switch each at FM1, FM2 and AM.

4

If tapped, the preset station can be called out. (The number of switch pressed will be indicated.)

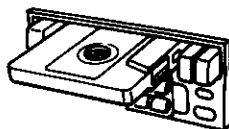


- If preset is to be made anew on the switch already preset, what was preset before will be replaced with what is to be preset.

TAPE PLAYBACK

TAPE PLAYBACK

Insert the cassette tape.
(Playback starts.)



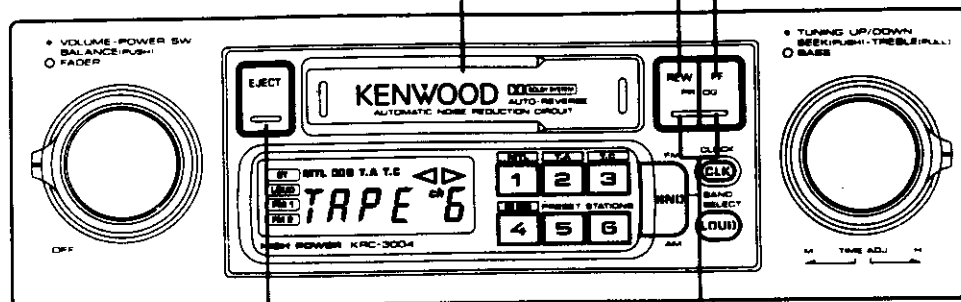
TAPE ▶

(During playback, ▶ will be indicated.)

FAST FORWARD/REWIND

Operation	Press
Fast forward	FF
Rewind	REW

To release, softly press the reverse switch.



PROGRAM

When you wish to listen to the reverse side, press these at the same time or softly the REW switch. (The reverse side will be played back.)

STOP PLAYBACK

Press the Eject switch.
(The cassette tape will come out.)

< Playback side >

When inserted with the side A up.

Indicator	Playback side
▶	Side A
◀	Side B

This will be reversed when inserted with the side B up.

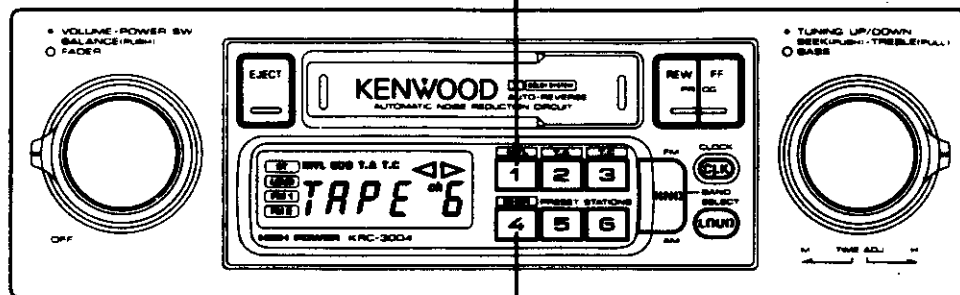
METAL TAPE AND DOLBY NR

METAL SWITCH

In tape play mode, press Metal switch to play back a CrO₂ or Metal tape.




ON



■ Functions of the KRC-3004

DOLBY B NR

In tape play mode, press  NR switch when playing back a tape recorded with Dolby B NR system.

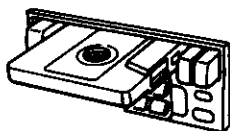


ON

TAPE ADVANCE (Functions of KRC-3004)

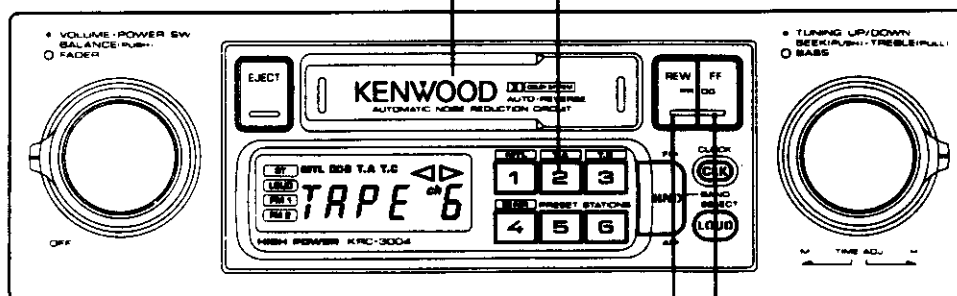
1

Play back the tape.



2

Press the Tape advance switch.



3

In case you wish to listen to the music now being played back from the beginning over again, press the REW switch.

(Rewind starts and it comes to play back at the beginning of the music you are now listening to.)

4

In case you wish to listen to the next music, press the FF switch.
(Fast forward starts and it comes to play back at the beginning of the next music.)

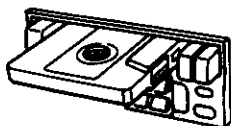


- Please note that in case of the following tapes, sometimes the tape advance does not function properly.
 1. When an interval between the music is less than 5 seconds.
 2. When a recorded portion of the low sound volume continues for more than 5 seconds.

TUNER CALL (Functions of the KRC-3004)

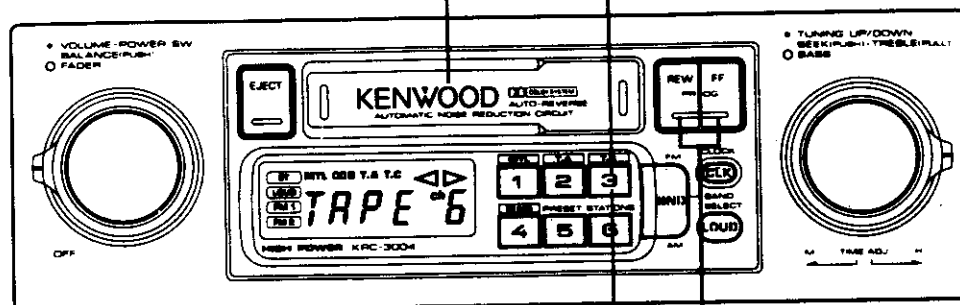
1

Play back the tape.



2

Press the Tuner call switch.



3

It will function as a tuner automatically during Fast forward and Rewind.

TO RELEASE

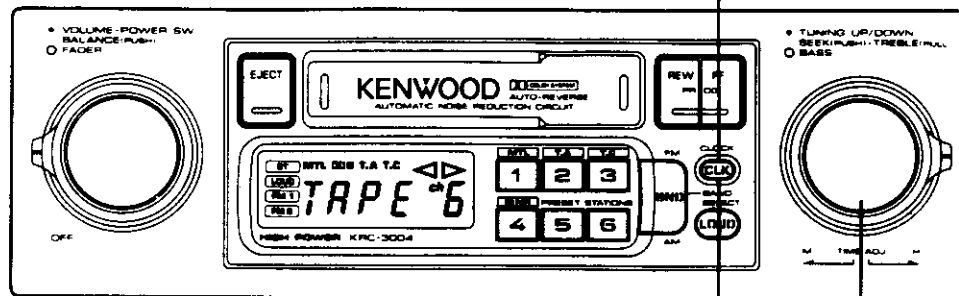
Press the Tuner call switch again.

CLOCK INDICATION AND CLOCK ADJUSTMENT

■ CLOCK INDICATION

Every time you press the Clock switch, the following indication will appear.

Mode	Indication
Tuner mode	Reception frequency ↔ Clock
Tape mode	TAPE ↔ Clock



■ CLOCK ADJUSTMENT

1

Make it clock indication and then continue to press the Clock switch.

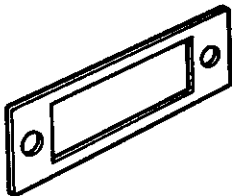

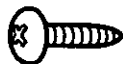




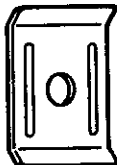


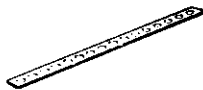


2

While the above-mentioned operation of 1 is continued, adjust "HOUR" and "MINUTE" by turning the knob in the counter-clockwise and clockwise directions respectively.



ACCESSORIES AND INSTALLATION

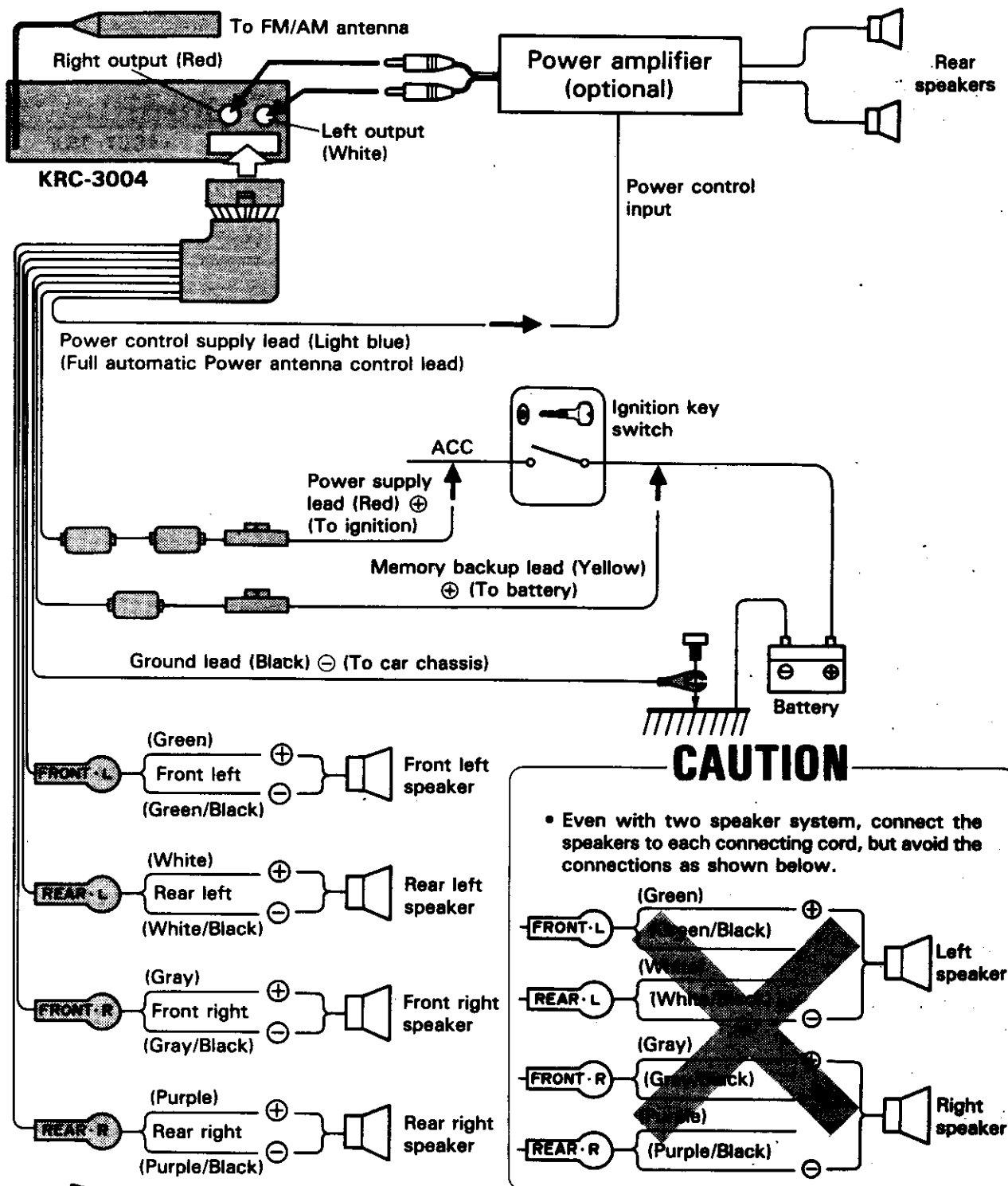
■ ACCESSORIES

No.	Part name	External View	Number of units	No.	Part name	External View	Number of units
①	Trim Plate		1	⑥	Washer assemblies screw (M5 × 8)		1
				⑦	Tapping screw (M5 × 16)		2
②	Control Knobs		2	⑧	Hex. Bolt (M5 × 20)		1
③	Control Knobs		2	⑨	Hex. Nuts (M10)		4
④	Metal Plate		2	⑩	Lock Washers (M5)		4
				⑪	Flat Washers (M5)		1
⑤	Metal Mounting Strap		1	⑫	Hex. Nuts (M5)		1
				⑬	Flat Washers (M10)		4

■ INSTALLATION

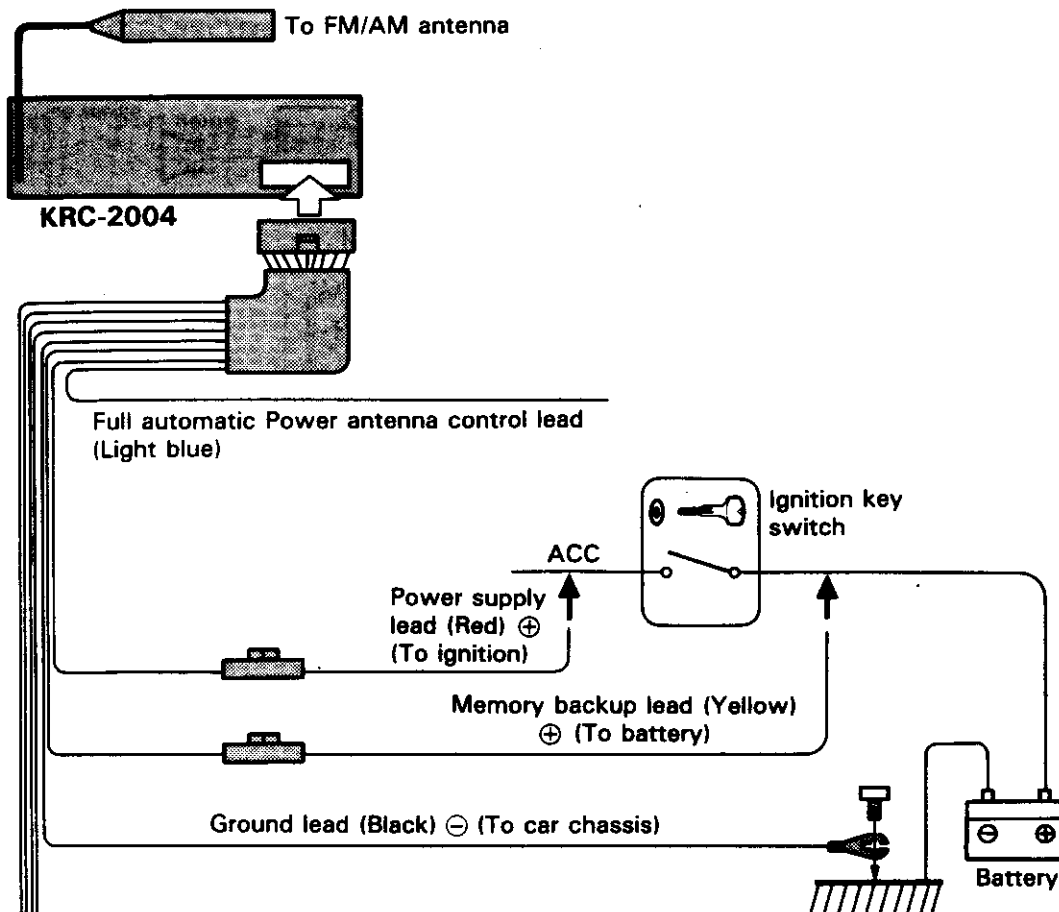
1. Before installation and wiring, remove the (-) terminal of the battery to prevent short-circuiting.
2. Connect the input and output cords of the system.
3. Connect the ground to the metal chassis of the car.
4. Connect the back-up power supply lead (yellow).
5. Connect the accessory power lead (red).
6. Install the set and after confirming the installation and wirings are correct, connect the (-) terminal of the battery.

CONNECTIONS (KRC-3004)



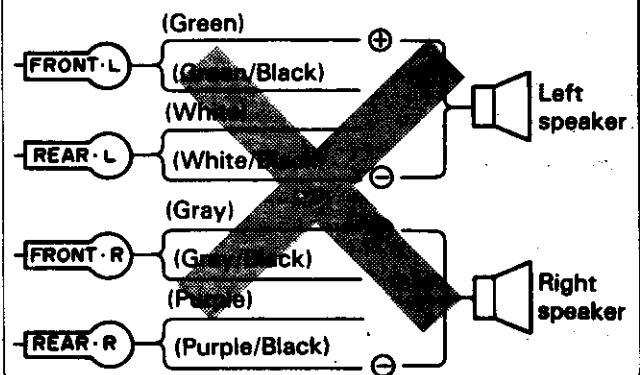
- As the unit uses BTL output, always connect the black stripe speaker wires to the ⊖ terminals of the speaker systems. Never let the ⊖ speaker wires touch and never connect them to the chassis (ground). Do not let the speaker terminals come into contact with the chassis (ground). Insulate any unused output wire to prevent a short circuit.
- If a fuse is blown, first check that the associated wires are not short-circuited, then replace the fuse with a new one having the same capacity.
- Secure unconnected wires properly so that they do not contact the vehicle chassis.

CONNECTIONS (KRC-2004)



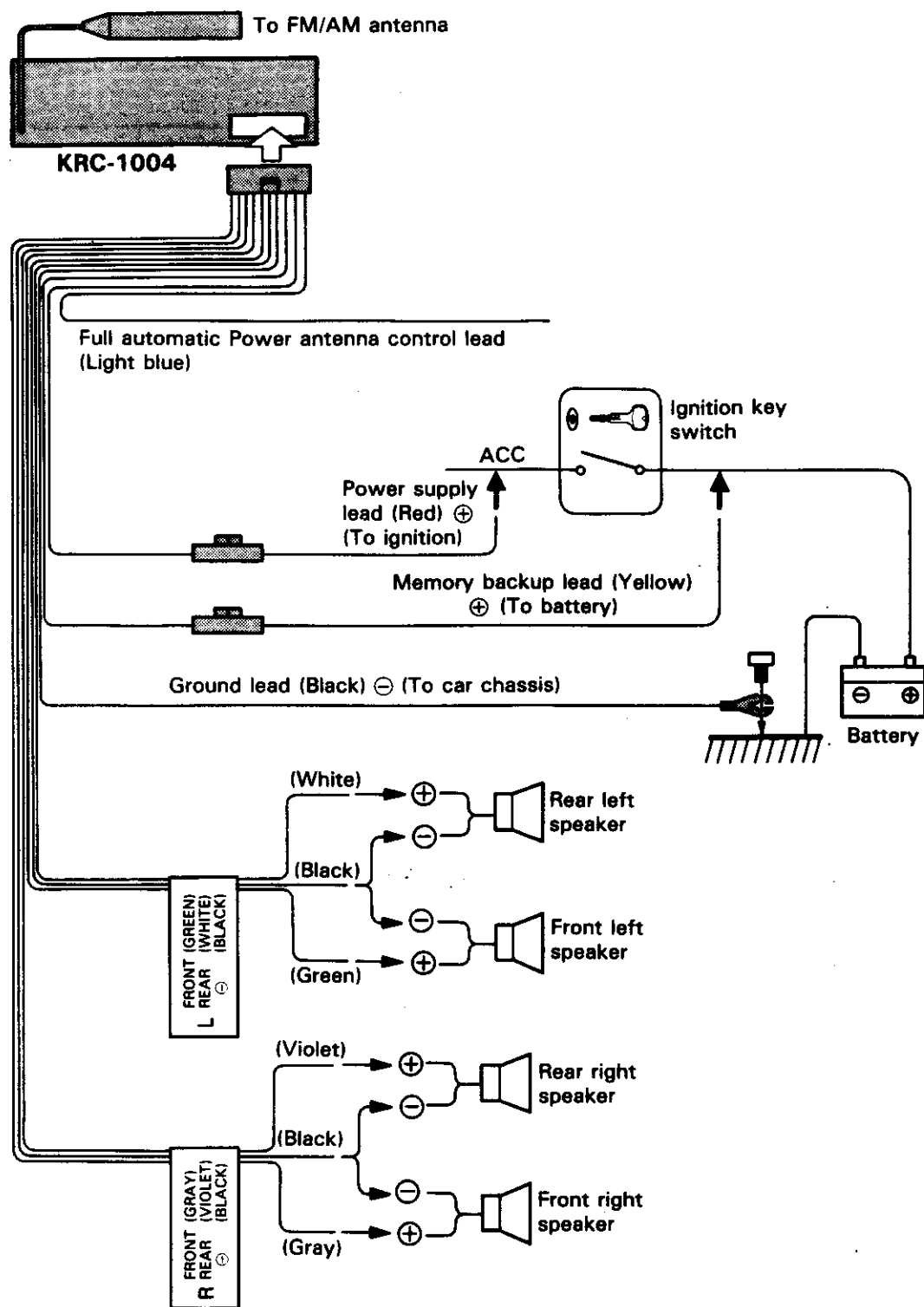
CAUTION

- Even with two speaker system, connect the speakers to each connecting cord, but avoid the connections as shown below.



- As the unit uses BTL output, always connect the black stripe speaker wires to the ⊖ terminals of the speaker systems. Never let the ⊖ speaker wires touch and never connect them to the chassis (ground). Do not let the speaker terminals come into contact with the chassis (ground). Insulate any unused output wire to prevent a short circuit.
- If a fuse is blown, first check that the associated wires are not short-circuited, then replace the fuse with a new one having the same capacity.
- Secure unconnected wires properly so that they do not contact the vehicle chassis.

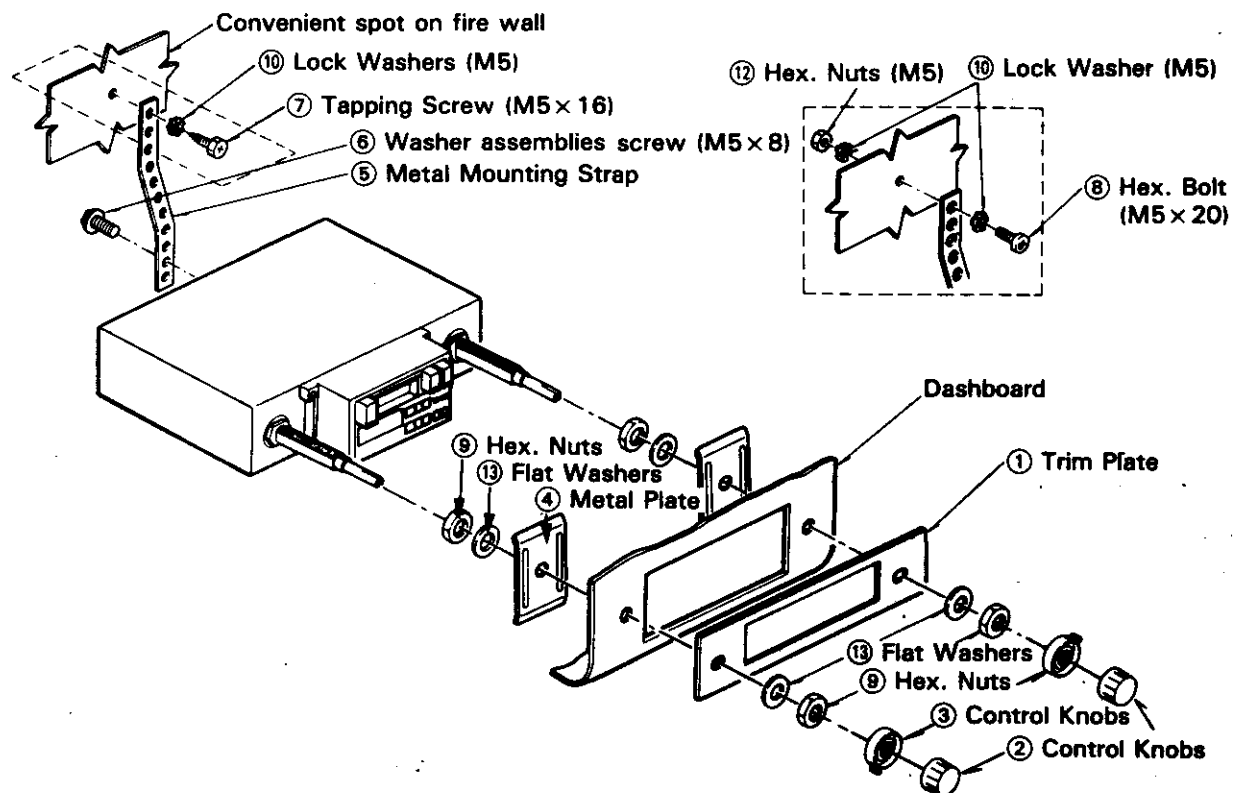
CONNECTIONS (KRC-1004)



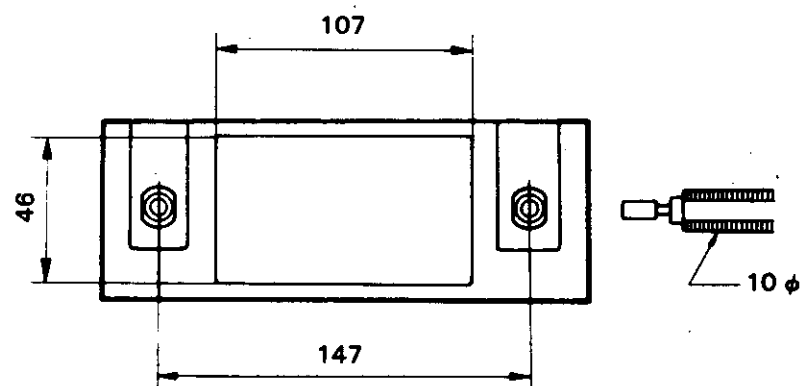
- If a fuse is blown, first check that the associated wires are not short-circuited, then replace the fuse with a new one having the same capacity.
- Secure unconnected wires properly so that they do not contact the vehicle chassis.

INSTALLATION

< Example of installation >



- The distance between the right and left shafts is adjusted to 147 mm.



TROUBLESHOOTING GUIDE

What often appears to be a malfunction is often due to user error in operation or connection. When trouble occurs with your unit, please check the following before calling for service.

Symptom	Possible cause	Remedy
No sound one channel	The balance/fader control is extremely rotated to one side.	Adjust the balance/fader control.
Poor reception	The antenna is not extended.	Extend the antenna.
Tonal quality is inferior.	Head is stained.	Carry out head cleaning.
Tape creaks.		

SPECIFICATIONS

Specification subject to change without notice.

FM TUNER SECTION

Frequency Range (200 kHz space)	87.9 MHz ~ 107.9 MHz
(50 kHz space)	87.5 MHz ~ 108.0 MHz
Usable Sensitivity	13.2 dBf (1.3 μ V/75 ohms)
50 dB Quieting Sensitivity	15.2 dBf (1.6 μ V/75 ohms)
Frequency Response (± 3 dB)	30 Hz ~ 15 kHz
Signal to Noise Ratio	70 dB
Selectivity	70 dB
Capture Ratio	2.0 dB
Image Response Ratio	70 dB
IF Response Ratio	120 dB
Stereo Separation (1 kHz)	38 dB

AM TUNER SECTION

Frequency Range (10 kHz space)	530 kHz ~ 1700 kHz
(9 kHz space)	531 kHz ~ 1611 kHz
Usable Sensitivity (S/N 20 dB)	28 dB (30 μ V)

CASSETTE DECK SECTION

Tape Speed	4.76 cm/sec.
Wow & Flutter	0.12% (WRMS)
Fast Winding Time (C-60)	100 sec.
Frequency Response (120 μ s)	30 Hz ~ 14 kHz (± 3 dB)
(70 μ s)	30 Hz ~ 16 kHz (± 3 dB)
Stereo Separation (1 kHz)	42 dB
Signal to Noise Ratio Dolby NR OFF	54 dB
Dolby B NR ON (KRC-3004 only)	63 dB

AUDIO SECTION

[KRC-3004/2004]

Maximum Output Power	25 W + 25 W or 15 W \times 4
Output Power (10% THD, 1 kHz, 4 ohms)	20 W + 20 W
(1% THD, 30 Hz ~ 20 kHz, 4 ohms)	15 W + 15 W

[KRC-1004]

Maximum Output Power	8 W + 8 W or 6.5 W \times 4
Output Power (10% THD, 1 kHz, 4 ohms)	6 W + 6 W
(1% THD, 30 Hz ~ 20 kHz, 4 ohms)	4 W + 4 W

Tone Action	Bass: 100 Hz ± 10 dB
	Treble: 10 kHz ± 10 dB
Preout Level/Load (KRC-3004 only)	1000 mV/10 kohms

GENERAL

[KRC-3004/2004]

Operating Voltage	14.4 V (11 ~ 16 V allowable)
Current Consumption	6.0 A at Rated Power
Installation size (W \times H \times D)	180 \times 50 \times 130 mm

(7-1/16 \times 1-15/16 \times 5-1/8 in.)

Weight 1.4 kg (3.1 lb)

[KRC-1004]

Operating Voltage	14.4 V (11 ~ 16 V allowable)
Current Consumption	2.7 A
Installation size (W \times H \times D)	180 \times 50 \times 130 mm

(7-1/16 \times 1-15/16 \times 5-1/8 in.)

Weight 1.3 kg (2.9 lb)